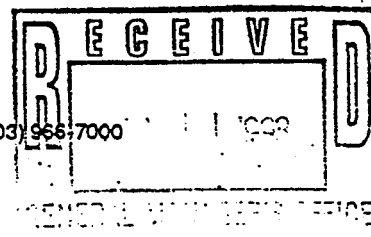


3 RF 5303

EG&G ROCKY FLATS

E&G ROCKY FLATS, INC.

ROCKY FLATS PLANT, P.O. BOX 464, GOLDEN, COLORADO 80402-0464 • (303) 966-7000



93-RF-5303

May 5, 1993

R. J. Schassburger, Deputy Director
Environmental Restoration Division
DOE RFO

PROPOSED DERIVED SOIL FOR RADIONUCLIDE CONTAMINATION IN SOIL - RLB-197-93

Ref: R. L. Benedetti ltr, RLB-0781-92, to R. M. Nelson, Response to DOE/RFO
Memorandum Regarding Radiological Contamination Characterization and Posting,
December 22, 1992

This letter provides supplemental information concerning the referenced correspondence, Item 2: Establish risk based action thresholds for radionuclide contamination in soil.

EG&G has previously discussed initiatives taken to develop soil action guidelines based upon requirements identified in Department of Energy (DOE) Order 5400.5, Radiation Protection for the Public and the Environment, 1989, and DOE Radiological Control Manual (RCM), (DOE/EH-0256T, DOE N 5480.6, 1992). The purpose of this correspondence is to propose use of the derived soil guidelines that follow, and those attached, for implementation of the RCM programmatic requirements for activities within a Soil Contamination Areas (SCA).

Soil Guidelines have been derived according to DOE/CH-8901, A Manual for Implementing Residual Radioactive Material Guidelines (RESRAD). The RESRAD computer program was used to perform the risk assessment. Following the recommendations of the code, a residential, family farm scenario was applied to all pathways. The risk assessment is based upon a limiting dose of 100 mrem/year. A mixture of radionuclides in soil as reported in the Operable Unit 1 Phase III Remedial Investigation Feasibility Study Draft Report, October, 1992, was used. In total, the conservative quality of the code insures the application of the As Low As Reasonable Achievable (ALARA) philosophy. The resultant guidelines are 33 pCi/gm for Americium-241 and 230 pCi/gm of Plutonium 239. Attachment 1 contains a complete report of the findings, including values for Uranium nuclides.

The proposed guidelines will be used to establish boundaries of SCAs. Implementation of SCAs will enhance the ongoing radiation protection program for environmental occupational workers and allow for compliance to the RCM.

REPLY TO RFP CC NO:
0346004-RF-92

SECTION	ITEM	STATUS
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9
10	10	10
11	11	11
12	12	12
13	13	13
14	14	14
15	15	15
16	16	16
17	17	17
18	18	18
19	19	19
20	20	20
21	21	21
22	22	22
23	23	23
24	24	24
25	25	25
26	26	26
27	27	27
28	28	28
29	29	29
30	30	30
31	31	31
32	32	32
33	33	33
34	34	34
35	35	35
36	36	36
37	37	37
38	38	38
39	39	39
40	40	40
41	41	41
42	42	42
43	43	43
44	44	44
45	45	45
46	46	46
47	47	47
48	48	48
49	49	49
50	50	50
51	51	51
52	52	52
53	53	53
54	54	54
55	55	55
56	56	56
57	57	57
58	58	58
59	59	59
60	60	60
61	61	61
62	62	62
63	63	63
64	64	64
65	65	65
66	66	66
67	67	67
68	68	68
69	69	69
70	70	70
71	71	71
72	72	72
73	73	73
74	74	74
75	75	75
76	76	76
77	77	77
78	78	78
79	79	79
80	80	80
81	81	81
82	82	82
83	83	83
84	84	84
85	85	85
86	86	86
87	87	87
88	88	88
89	89	89
90	90	90
91	91	91
92	92	92
93	93	93
94	94	94
95	95	95
96	96	96
97	97	97
98	98	98
99	99	99
100	100	100

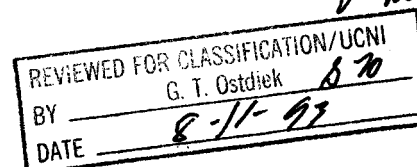
 CLOSED

PARTIAL
TRA. NOVALS:

MCB:
RIG & TYPIST INITIALS

DA:1A

ADMIN RECORD



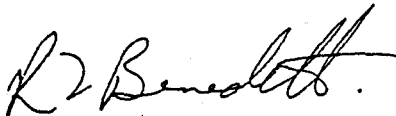
A-SW-000783

R. J. Schassburger
May 5, 1993
93-RF-5303
Page 2

Compliance to the RCM has significant impact. Programmatic operations, occupational safety, and training requirements for Restoration activities occurring in SCAs will be effected. Thus, fiscal increases are anticipated. The full extent of this impact is not yet determined, in that EG&G is in the implementation phase of the Site Specific Radiological Control Manual.

EG&G is requesting concurrence to the application of the proposed soil guidelines by June 4, 1993. If no response is received, EG&G will begin the process of incorporating the guidelines for the determination of SCAs. The limits will be implemented into appropriate environmental radiological protection programs and procedures.

If you have any questions regarding this letter and attachment, please contact K. D. Anderson of my staff at extension 6979.



R. L. Benedetti
Associate General Manager
Environmental Restoration Management
EG&G Rocky Flats, Inc.

KDA:la

Orig. and 1 cc - R. J. Schassburger

Attachment:
As Stated